Neighborhood Traffic Management Program Guidelines 2.0

Revised February 2016

CDOT – Chattanooga Department of Transportation
1250 Market Street, Suite 3030
Chattanooga, TN 37402

HISTORY AND PURPOSE

The popular Neighborhood Traffic Management Program (NTMP), whose first projects included traffic circles on Old Mission Drive in 1995 and rubber speed cushions on Tremont Street in 2002, has proven quite popular throughout the city. At times, there has been a healthy waiting list for project implementation.

The original program included a multi-step process whereby Transportation staff established eligibility, assisted neighbors with establishment of neighborhood consensus, and, then, given neighborhood acceptance and funding, designed a plan for implementation.

The petition process has the obvious benefit of assuring neighborhood support before investment of significant funding/time. But a less recognized benefit of the neighborhood interaction encourages a sense of community and shared ownership by residents of their neighborhood streets, which also has benefits for neighborhood safety and security.

Using the popularity of the program and identified measurable outcomes such as lower speeds, reduced accidents, increased quantity of walkers and bikers, as well as the underlying, known, economic value of lower speeds in neighborhoods, NTMP 2.0 springboards off the first program's vast successes to apply a new, broader set of tools, improvements, and implementation strategies.

The expanded program will use the tool-kit of NTMP 1.0 as a foundation, including preliminary evaluation, interaction with neighborhood, encouragement of neighborhood buy-in through a petition process, and diagnostic analyses of traffic conditions in a neighborhood. New benefits associated with NTMP 2.0 include:

- Safety for walking, biking, and driving in neighborhoods
- Crime-prevention through active involvement in the neighborhood about the shared value of their street
- Property damage-prevention – similar to crime prevention, we believe the act of building neighborhood consensus on the safety of the neighborhood streets builds more community respect and a system of checks based on the notion of, "this is our street". Neighbors that have a sense of shared ownership of their street will tend to look out for it, lowering the chance for vandalism and burglary
- Improved property values

Tools that will be considered in the expanded program include but are not necessarily limited to:

- the original NTMP 1.0 standards, including speed cushions and traffic circles.
- street diets
- streetscaping
- street median landscaping
- chicanes
- additional signage and markings, such as, "state-law, yield for pedestrians in crosswalk" paddles, pedestrian signals, other warning signs and markings
- on-street parking plan and implementation strategy
- neighborhood advocacy campaign strategies and support

The City of Chattanooga is continually striving to strengthen and protect its neighborhoods. A cherished neighborhood goes hand in hand with a comprehensive, safe, and accessible transportation system. Neighborhood streets are usually Local Streets as defined in our city's street classification system which designates streets based on their volume, speed, and function. Local streets, being usually for residential neighborhoods, should be people-oriented streets first and foremost, and while useful as alternative, secondary routes for the larger grid network, still should be designed and enforced as low-speed streets; for safety of the neighborhood. Higher classified streets, such as collectors, arterials, and local streets that are more commercially oriented, can accommodate higher traffic, speed, and parking capacity, either on-street or via access to private properties. Such streets typically have greater potential for conflict, especially where there is a strong presence or possible presence of pedestrians or cyclists. Because of the fundamental differences among streets and neighborhoods, implementation strategies differ based on such features as street classification and the neighborhood context.

Nevertheless, all streets should be safe for people.

The Neighborhood Traffic Management Program (NTMP) 2.0 seeks to improve safety on our city streets. The program pursues safer streets through neighborhood buy-in and participation, cross-departmental collaboration, and development of safe streets strategies that are particular to the neighborhood, and/or capital improvement planning, funding, and implementation.

DEFINITIONS

Accident History – accident history relates to the number of correctable speed related accidents that have been recorded during the past three years. Potential safety problems can be identified by analyzing prior accident data.

Applicant – The Applicant is considered to be the representative of the neighborhood, either formally identified through the Neighborhood Transportation Subcommittee, or, by default, the individual who initially contacts the Department to initiate the NTMP 2.0 process.

Local Street – local streets are those streets that are not designated as major (collector or arterial) streets in the City of Chattanooga Thoroughfare Plan.

Major Street- major streets, classified as arterials or collectors, can sometimes be eligible for traffic management depending on volume, proximity to residential areas or schools, presence of challenging traffic safety features, or strong pedestrian or bicycle safety.

Neighborhood Transportation Subcommittee – A committee of manageable size (recommended 5 persons, maximum 15) that will represent the neighborhood in design blitzes to determine the best solution for the particular neighborhood and effects of implementation.

Petition Area – The petition area is defined as the area including all residents which will be affected by the traffic calming measures.

Streetscape – Streetscape is a general term for improvements to street edges and/or medians that can include on-street parking, landscaping, sidewalks, curb and gutter, special paving, street/sidewalk furniture or other features that improve the usability of the street for walkers, bikers, and urban storefronts. Streetscapes can effectively create a sense of place and space that improves a feeling of shared ownership and can calm traffic.

Traffic Calming Devices – Physical Measures, including traffic circles, curb extensions, rubber speed cushions, asphalt speed tables, medians, chicanes, and other devices within public right-of-way used to alter driver behavior and improve conditions for non-motorized street users.

Traffic Management – The term used in this document for the entire set of strategies, including educational, capital, traffic control devices, land-scape, or other strategies used in the design and implementation of the program on a subject street.

Traffic Volume – Traffic volume refers to the number of vehicles passing a given point during a specified period of time. Daily (24-hour) traffic volume counts are utilized for NTMP analyses.

Traffic Speed – Traffic speed refers to the rate of vehicle movement. The NTMP utilizes the 85th percentile speed, i.e. 85 percent of the vehicles sampled are at or below a particular speed.

CRITERIA

Principles

The following principles will be used throughout the program, both in initial evaluation of need, design elements and solutions, and overall purpose.

1. Simple is smarter.

2. Grassroots strategies are most enduring and encourage neighborhood-ownership and buy-in. Sometimes, simple safety campaigns, which can be initiated in the petition process, can have a great effect on driver habits in neighborhoods.

In many cases, capital improvements are necessary and effective at improving neighborhood safety; however, sometimes, simple neighborhood participation and awareness can be effective. NTMP 2.0

will focus on efficient and smart stewardship of tax payer dollars and, as such, will strongly consider strategies both that require capital investment and those that do not.

3. Access: All projects will focus on safe and comfortable access for all mode users (pedestrians, cyclists, and motorists).

4. When design implementations are determined to be justified and expected to be effective, and the neighborhood has demonstrated a majority consensus for implementation of the program, the Transportation Department will determine the design track and solution appropriate based on each condition. See Evaluation for more information on design tracks and tools that could be used in neighborhoods.

5. Solutions must be comprehensive for the greater network – critical functions such as the following will always be considered in establishing eligibility and design solutions:

a. The classification of surrounding streets and overall local and neighborhood traffic flow.
b. Emergency vehicle access
c. Pedestrian and cycling patterns of circulation.
d. Neighborhood parking

Eligibility:

NTMP 2.0 expands the eligibility requirements to include streets that might serve more than just single-family houses. It also stresses design solutions which utilize a full spectrum of tools, from neighborhood campaigns, to landscaping, parking, pedestrian/bike access and safety, and, of course, the traffic control devices that have been used frequently on NTMP projects in the past.

Some streets are not appropriate test cases for this program, either because of function or physical characteristics – as such, we check all streets against the following criteria before initiating the process.

Ineligibility:

1. Streets that contain a traffic volume greater than 5,000 ADT are ineligible based on a belief that such streets have regional traffic function and therefore are not only for the neighborhood, but also the greater network of the city as a whole. Improvements for these kinds of streets are more complicated and should be undertaken with stand-alone capital improvement projects.
2. Dead-end streets.
3. Streets sections that are less than 1000 feet between controlled intersections (stop signs or signalized intersections) are ineligible based on the assumption that such streets are not long enough for normal traffic to achieve unsafe speeds.
4. Street sections within 500 feet before and after curves with centerline radius less than 600' based on the assumption that such tight curve streets are inherently traffic calming.
5. Most through-truck routes,
6. Roadways with grades over 8% due to the danger of installing humps on steep slope streets.

7. Roadways that are less than 18 feet in width, based on the assumption that narrow streets inherently calm traffic.

Evaluation

Projects can follow one of two tracks, based on the discretion of the Transportation Department.

Track 1 – Speed Humps/Cushions and Traffic Circles
Many projects, due to simplicity, residential character, and physical characteristics of the street, are particularly well-suited for simple, quick, and efficient installation of standard traffic control devices. These projects will follow a track similar to the original 1.0 program.
Track 2 – Expanded Neighborhood Design Solutions
For projects that justify an expanded program of design solutions, Track 2 has been developed as a deliberate expansion of the success of NTMP 1.0 and incorporating inter-departmental collaboration, neighborhood input, and a wider range of design solutions.

PROCESS

Criteria for Participation in the Program

Initial eligibility is determined by Transportation Department staff through the following steps.

Preliminary Staff Analysis

1. An initial request is made by the neighborhood (via an individual or group calling 423-643-5950).
2. Transportation Department staff makes an initial review of the project – checking for criteria, such as length, dead-end, initial traffic count, steepness of grades, street width, and etc.
3. If the street qualifies, staff contacts the Applicant to discuss the next steps.
4. If the street does not qualify, staff contacts the applicant to assist the neighborhood with alternative traffic measures, including the installation of Speed Radar signs, the development of a Neighborhood Speed Watch program, or other similar speed awareness activities.

Preliminary Community Support – *Neighborhood Petition Completion*

After projects are determined to be eligible, the neighborhood must demonstrate support from the citizens in the affected area. Responsibility for completion of this phase rests with the community and involves the following steps:

1. A staff member will review the neighborhood concerns and define Petition Area on a map. At this point, the neighborhood is responsible for demonstrating consensus among the property owners in the petition area. **Applicants should not circulate petitions until provided a CDOT defined petition area map. Applicants are to contact their City Council representative.**
2. Transportation Department staff will provide the details for the top portion of the Petition form (final page of this document) with the description of the petition area, and signatures must be gathered from at least 2/3 of the households (owners or renters) within the petition area. Only one signature per address will be counted. Completed petitions can be mailed or delivered to: Transportation Department– NTMP, 1250 Market Street, Suite 3030, Chattanooga, TN 37402

3. In anticipation of the final step of the process, and assuming the neighborhood demonstrates support, the representative(s) of the neighborhood are encouraged to identify (by call of volunteers) a Neighborhood Transportation Subcommittee. This subcommittee will represent the neighborhood in subsequent meetings to determine the best solution for the particular neighborhood and the effects of implementation. The subcommittee should include roughly 5-6 different property owners. These limitations facilitate efficiency of communication and provide for a functional working group when/if design decisions need to be made.

Preliminary Safety Analysis

After the neighborhood has submitted the Petition showing 2/3 support of the property owners, the Transportation Department will complete a traffic analysis of the street. The analysis includes an on-site traffic volume count and speed study, as well as compilation of all accident reports related to the street in question.

The Transportation Department uses objective grading criteria during this analysis to determine severity of the safety problem. The point system is detailed in the table below. Qualification depends on the accumulation of at least 3 points based on the analyses completed during this step.

TABLE 1 GRADING SYSTEM CRITERIA	Points
Accident Per Year	
1 annually	1
2 annually	2
3 or more	3
Traffic Volumes Per Day	
500 - 1000 vehicles per day	1/2
1000 - 1500 vehicles per day	1
1501 - 2000 vehicles per day	1 ½
2000 - 2500 vehicles per day	2
2500 – 3000 vehicles per day	2 ½
3000 + vehicles per day	3
Traffic Speeds 85% Percentile	
2 MPH over posted speed limit	1/2
3 MPH over posted speed limit	1
5 MPH over posted speed limit	1-1/2
7 MPH over posted speed limit	2
8 MPH over posted speed limit	2-1/2
10 MPH over posted speed limit	3

Applicants should understand that the analysis that we undertake to grade these streets requires technical analysis, and diagnostic tools, all of which are finite resources within the City of Chattanooga. As good stewards of all of our taxpayer resources, our objective grading system is critical to keeping our work and time focused on the streets where safety is seen as a relatively significant problem. If the analysis determines that your street does not qualify, we will notify the initial Applicant and suggest

alternatives, such as community-driven solutions, police enforcement, or other actions that can have a positive effect.

If the street does qualify, earning the minimum number of points, The Transportation Department staff will determine which design track is appropriate. For many projects, we will recommend track 1, a simpler and quicker installation of traffic control devices that can be designed, scoped, and implemented internally. For track 2 projects, either due to physical characteristics of the street, potential development synergies, or other circumstances that suggest a wider design solution might be appropriate, the Applicant will be given the option to pursue Track 2.

Design

Track 1

For simpler projects, Transportation Department staff will develop a plan, including location and number of speed cushions, humps, or traffic circles, and will present this solution to the Applicant. If the solution is mutually agreed-upon, then the project is prioritized, Transportation staff writes a work order and the project is implemented based on availability of funding and schedule of labor forces.

Track 2

For projects deemed appropriate, and if the Applicant and/or neighborhood transportation committee elects to pursue track 2, the Transportation Department initiates a collaborative design blitz to determine the best tools and solutions to address the issues. This design blitz may include staff from Traffic Engineering, Transportation Design/Engineering, Economic and Community Development, and the Regional Planning Agency, as well as representatives of the Neighborhood Transportation Committee. The purpose of the design blitz is to gather feedback from the neighborhood and develop a consensus on the boundaries and scope of work as it relates to traffic calming tools. Based on consensus of this meeting, city staff will collaboratively develop a design solution that may include any combination of traffic control devices and other tools for making streets safer.

Schedule and Implementation/Construction

The following schedule generally applies to all projects regardless of track 1 or 2. Applicants should remember that all projects are contingent on funding and prioritization, and depend on ample staff time and lead time for materials. In some cases, particularly for those track 2 projects, design solutions may include elements that can be implemented by the neighborhood, and others that would be implemented by city forces; in those scenarios, the design solution should articulate a phasing approach so that implementation by the city can happen separately from that which is completed by the neighborhood or other funding sources.

Plan Development

Plan Development, which typically requires one to two months, includes establishment of the scope of work, either through track 1 or track 2. The department's preferred solution will be shared with the neighborhood for a period of time to gauge support. If no significant opposition is received, the project will go into the queue for funding and installation.

Field Demonstration

In most cases, a field demonstration of the proposed traffic calming project will be conducted by installing temporary traffic control devices, such as traffic cones, construction drums, rubber curbing, and portable traffic control signs to test the effectiveness of the proposed traffic calming plan. A review of how traffic conditions are impacted by the demonstration will allow the designers to assess the effectiveness of the project and provide them with the opportunity to make any design modifications before implementation of the permanent traffic calming plan.

Final Approval Process

The petitioning individual/group shall call a meeting of the neighborhood residents at which time a vote should be taken to determine the level of support for the demonstrated traffic control plan. A formal letter outlining the results of that vote should be forwarded to the Transportation Department.

Phase 4 – Design and Installation/Construction -

Based on the demonstration, location and visual appearance of the permanent device(s) will be designed. The final design will be reviewed by neighborhood residents and the Police and Fire Departments. The design will be estimated by city staff and added to a list of capital projects and incorporated into the overall capital plan for scheduling based on synergies with other infrastructure improvements, development, plans, and availability of funding. Installation/construction will be by City crews as funding is available.

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PETITION FOR NEIGHBORHOOD TRAFFIC MANAGEMENT

Description of area of request: _____

_____

_____

We, the undersigned property owners or tenants, do respectfully petition the City of Chattanooga, Transportation Department to conduct a neighborhood traffic management study for the above described area.

Applicant: _____ Phone: _____

Applicants should not circulate petitions until provided a CDOT defined petition area map. Applicants are to contact their City Council representative.

Date submitted to the City of Chattanooga: _____

	NAME	ADDRESS	Signature
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(Please make copies of this sheet as needed)

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